UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------------------------|----------------------|---------------------|------------------|
| 10/646,162 | 08/22/2003 | Keith C. Thomas | P1976US00 9183 | |
| 24333 GATEWAY, II | 7590 12/28/2006 NC. | EXAMINER | | |
| ATTN: Patent | Attorney | HUNNINGS, TRAVIS R | | |
| 610 GATEWAY DRIVE MAIL DROP Y-04 | | | ART UNIT | PAPER NUMBER |
| N. SIOUX CIT | • • • | 2612 | | |
| | - | | | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MO | NTHS | 12/28/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| 1/ |
|----|
| |
| וע |

| | Application No. | Applicant(s) | | | | |
|---|---|-----------------------|--|--|--|--|
| 055- 4-4- 0 | 10/646,162 | THOMAS, KEITH C. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| · | Travis R. Hunnings | 2612 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 31 Oc | Responsive to communication(s) filed on 31 October 2006 | | | | | |
| | | | | | | |
| , | ,— | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 17 and 18 is/are pending in the application | ation. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) 17 and 18 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>19 January 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the o | | • | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1.☐ Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents | have been received in Applicati | on No | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) | 4) 🔲 Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal P 6) Other: | atent Application | | | | |
| Patent and Trademark Office | -, <u>-</u> | | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 2. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantom Orb Disk Drive (Fantom; www.fantomdrives.com/support/manuals/orb_supplement.pdf).

Regarding claim 17, the claimed indicator configured to provide illumination and being visible from a front panel of the computer system is met by the status light (Front Panel drawing) indicating that the drive is ready by a solid green light (During Operation section);

The claimed activity detection circuit coupled to the indicator, the activity detection circuit being configured to generate an activity signal indicative of the presence of a second periodic operating condition associated with a component of the computer system, and to communicate the activity signal to the indicator would have been inherent in the device to operate the functions of detecting the drive being on and loading/unloading/using the disk and altering the status light to reflect the current condition (During Operation section);

Application/Control Number: 10/646,162

Art Unit: 2612

The claimed indicator has a continuously illuminated condition in response to the presence of a first continuous operating condition is met by the status light being green when the drive is on (LED Indicator Definitions section);

The continuously illuminated condition of the indicator is interrupted in response to reception by the indicator of the activity signal, the indicator being extinguished when the activity signal is received by the indicator to thereby produce an intermittently illuminated condition indicative of a second periodic operating condition such that the indicator is extinguished in response to occurrence of the second periodic operating condition is met by the flashing amber light to indicate that the disk is loading or in use which would interrupt the constant green light (During Operation section);

The claimed first continuous operating condition consists of a power-on operating condition of the computer system and the second periodic operating condition comprises input and output activity of a hard disk drive is met by the green light indicating power being present to the device and the flashing amber light indicating data being written or read on the ORB disk (LED Indicator Definitions section). One of ordinary skill in the art would have considered reading or writing data to an ORB disk to be a hard disk drive operating condition because hard disk drives also read or write data to a disk;

Fantom does not specifically disclose the claimed activity indicator consisting of a single color LED however it would have been obvious to one of ordinary skill in the art that a single color LED would be able to accomplish the same indication by providing a steady indication when no disk access was occurring (representing the steady green

Art Unit: 2612

light as disclosed by Fantom) and also able to provide the flashing indication when disk accesses were occurring (representing the flashing amber light as disclosed by Fantom) and using a single color LED would lower costs. Therefore it would have been obvious to one of ordinary skill in the art to use a single color LED. Also at any point in time, the disclosed indicator of Fantom is always indicating only a single color, whether it be green, amber or red and would therefore be providing single-color indication and would therefore be considered a single-color LED by one of ordinary skill in the art.

Regarding claim 18, the claimed activity indicator is the only visible indication of the first continuous operating condition and the activity indicator is the only visible indicator of the second periodic operating condition is met by the status light being lit and being the only visible indication of the first condition and the flashing light being the only visible indication of the second condition.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2612

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UPERVISORY PATENT EXAMINER

(2/26/06

TRH